

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 39-45 and 47-80 are presently pending in this case. Claims 57-77 are withdrawn. Claims 39 and 54 are amended and new Claims 78-80 are added by the present amendment. As amended Claims 39 and 54 and new Claims 78-80 are supported by the original disclosure,<sup>1</sup> no new matter is added.

In the outstanding Official Action, Claims 39-45 and 47-56 were rejected under 35 U.S.C. §103(a) as unpatentable over Deguchi et al. (European Patent Application Publication No. 0 844 319, hereinafter “Deguchi”); and Claims 39-45 and 47-56 were rejected under 35 U.S.C. §103(a) as unpatentable over Deguchi in view of Ekstrom et al. (U.S. Patent No. 6,914,025, hereinafter “Ekstrom”).

With regard to the rejection of Claims 39 and 54 as unpatentable over Deguchi, that rejection is respectfully traversed.

Amended Claim 39 recites in part:

a layer of CVD diamond grown onto a diamond loaded (DL) material, the DL material comprising a mass of diamond particles in a matrix and having a surface with exposed diamond particles on which the layer of CVD diamond is grown, ***the diamond particles having a diameter of at least 10  $\mu\text{m}$ ,***

Amended Claim 54 recites in part “a layer of DL material having major surfaces on each of opposite sides thereof, ***the layer of DL material including diamond particles having a diameter of at least 10  $\mu\text{m}$ .***”

In contrast, Deguchi describes a diamond film growing on the substrate including diamond grains. As shown in Figure 6 of Deguchi and described at column 11, lines 54-57, the diamond grains can have an average diameter of ***no greater than 0.1  $\mu\text{m}$***  to maintain the

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<sup>1</sup>See, e.g., the specification at page 5, lines 2-15 and page 6, lines 3-5.

nucleation density needed for the invention of Deguchi. Accordingly, not only does Deguchi fail to teach or suggest a layer of DL material including diamond particles having a diameter of *at least 10  $\mu\text{m}$* , Deguchi explicitly teaches that diamond particles of the size will not work with the invention of Deguchi. Consequently, not only does Deguchi fail to teach or suggest each and every element of amended Claims 39 and 54, there would be no teaching or suggestion to modify Deguchi with any other reference to create the invention recited in amended Claims 39 and 54. Therefore, Claims 39 and 54 (and Claims 40-45, 47-53, 55, 56, and 78-80 dependent therefrom) are patentable over Deguchi.

With regard to the rejection of Claims 39 and 54 as unpatentable over Deguchi in view of Ekstrom, that rejection is respectfully traversed.

As noted above, not only does Deguchi fail to teach or suggest a layer of DL material including diamond particles having a diameter of *at least 10  $\mu\text{m}$* , Deguchi explicitly teaches that diamond particles of the size will not work with the invention of Deguchi. Thus, there would be no teaching or suggestion to make the proposed combination of Deguchi in view of Ekstrom. Consequently, Claims 39 and 54 (and Claims 40-45, 47-53, 55, 56, and 78-80 dependent therefrom) are also patentable over Deguchi in view of Ekstrom.

Finally, new Claims 78-80 are supported at least by the specification at page 5, lines 2-15 and page 6, lines 3-5. New Claims 78-80 are dependent from Claim 39, and thus are patentable for at least the reasons described above. Moreover, new Claims 78-80 recite subject matter that is not taught or suggested by the cited references. Consequently, new Claims 78-80 further patentably define over the cited references.

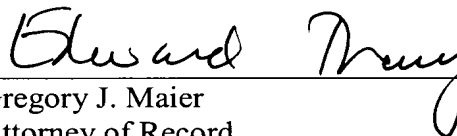
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Reply to Office Action of January 25, 2008

Accordingly, the pending claims are believed to be in condition for formal allowance.

An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read "Edward Tracy", is written over a horizontal line.

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